

# ANALYSIS OF THE EFFECT OF ASSETS GROWTH AND CAPITAL STRUCTURE ON PROFITABILITY WITH MANAGEMENT OWNERSHIP AS A MODERATING VARIABLE IN REAL ESTATE AND PROPERTY COMPANIES LISTED IN INDONESIA STOCK EXCHANGE IN 2011-2013

**Harlen Silalahi, Erlina, Arifin Akhmad**

Universitas Sumatera Utara

[harlen.silalahi10@gmail.com](mailto:harlen.silalahi10@gmail.com)

## ABSTRACT

*The objective of the study was to analyze the influence of asset growth and capital structure on profitability with management ownership as moderating variable at real estate and property companies listed in the Indonesia Stock Exchange, in the period of 2011-2013. The samples consisted of 38 companies with 114 analysis units, taken by using saturated or census sampling technique when the population was used as the samples. The data were gathered by conducting documentary study; secondary data were financial statement and annual report, which were publicized through [website.idx.co.id](http://website.idx.co.id), stock price, and composite stock price index. The gathered data were analyzed by using multiple linear regression analysis and residual analysis for moderating variable. The result of the research showed that, simultaneously and partially, asset growth and capital structure had significant influence on profitability at real estate and property companies listed in the Indonesia Stock Exchange, in the period of 2011-2013. It was also found that management ownership was able to moderate (enforce) the correlation of asset growth and capital structure with profitability at real estate and property companies listed in the Indonesia Stock Exchange, in the period of 2011-2013.*

**Keywords :** Asset Growth, Capital Structure, Profitability, Management Ownership

## 1. INTRODUCTION

Survival and growth of the company is influenced by the company's ability to generate profits or profitability of the company. Profitability is one measurement for the performance of a company, the profitability of a company shows the ability of a company to generate profits during a certain period at the level of sales, assets and certain share capital. In general, the problem of profitability is more important than the problem of profit, because large profits are not yet a measure that the company works efficiently, because the notion of efficiency in the economic field is the achievement of results at a certain level with the smallest possible costs, where achieving efficiency means an effort to maintain the possibility of obtaining optimal profits, thus efficiency can only be known by comparing the profits obtained with the overall capital used to generate profits, where the efficiency of the use of capital here means that every business to use a certain amount of capital with results achieved as much as possible with Cost Of Capital relatively low.

Profit is one of the main goals of the establishment of every business entity. Without profit, the company cannot fulfill the other goals, namely going concern. Now business development is increasing to meet the needs of the community and lead to

competitive competition, especially between similar companies. The company will carry out various activities to achieve its goal of earning profits and maintaining the survival of the company. Competition makes every company try to improve performance to achieve goals such as high profits. Efforts to anticipate these conditions, the company's financial managers must be careful in determining the company's capital structure.

Empirical data on the profitability of Real Estate and Property companies listed on the Indonesia Stock Exchange (IDX) for the 2011-2013 period can be seen in Table 1.1.

**Table 1.1 Average Profitability Ratio, Capital Structure and Asset Growth of Real Estate and Property Companies listed on the Indonesia Stock Exchange (IDX) for the period 2011-2013**

No.	Year	Profitability		Asset Growth (%)	Capital Structure	
		<i>Return On Assets (ROA) (%)</i>	<i>Return On Equity (ROE) (%)</i>		<i>Debt Ratio (DR) (%)</i>	<i>Debt to Equity Ratio (DER) (%)</i>
1	2011	5,744	12,578	0,15	47,333	123,8
2	2012	7,777	15,611	0,13	44,6	105,933
3	2013	7,525	15,808	0,28	44,2	96,2

Source: Indonesia Capital Market Directory (ICMD) (processed), 2014.

Based on Table 1.1 it can be seen that the average leverage ratio of DR and DER as well as asset growth has decreased in the period 2011-2012. This is different from ROE which has increased every year in the 2011-2013 period, while ROA has increased in 2011-2012 and has decreased in 2013 so that the leverage ratio and asset growth to profitability have a different direction relationship, namely when the leverage ratio and Declining asset growth will increase the company's profitability.

One of the factors that influence profitability is asset growth. Assets are assets owned by companies that play a role in the company's operations such as cash, inventories, fixed assets, intangible assets, and others. The greater the asset, the greater the operational results generated by the company.

In addition to asset growth factors, other factors that influence profitability are capital structure. Capital structure is part of the financial structure. Every company wants their business to run smoothly and can even develop.

Several previous studies that have carried out research on the growth of assets and capital structure, then this study wants to examine more about the effect of asset growth and capital structure on the profitability of the company. This is because the results of previous studies regarding the influence of ownership structure on the profitability of the company showed inconsistency, both research in Indonesia and abroad. The difference between this research and previous research is that this study combines all ownership structure variables that have been examined by previous researchers, namely foreign ownership, government, managerial, institutional and family.

The purpose of this research is to know and analyze the effect of simultaneous and partial growth of assets and capital structures on the profitability of real estate and property companies listed on the Indonesia Stock Exchange and also analyze whether management ownership is able to moderate the relationship between asset growth and capital structure with company profitability real estate and property listed on the Indonesia Stock Exchange (IDX).

## **2. HYPOTHESIS**

1. The growth of assets and capital structure simultaneously and partially affects the profitability of real estate and property companies listed on the Indonesia Stock Exchange.
2. Management ownership is able to moderate the relationship between the growth of assets and capital structure with the profitability of real estate and property companies listed on the Indonesia Stock Exchange.

## **3. METHOD**

This type of research is causal associative research. According to Umar (2003) causal associative research is "research that aims to analyze the relationship between one variable with another variable or how a variable affects other variables". This study uses a relationship or associative research design and according to the nature of the relationship the research uses causal relationships.

In this case the research aims to analyze the effect of asset growth and capital structure on profitability with management ownership as a moderating variable in real estate and property companies listed on the Indonesia Stock Exchange in 2011-2013.

This research was conducted at the Indonesia Stock Exchange through internet media using the official website of the Indonesia Stock Exchange: [www.idx.co.id](http://www.idx.co.id). and Indonesian Capital Market Directory books..

In the methodology stage, the next research is the population stage and sampling. The population stage and sampling is done after making a hypothesis. It has been explained that the hypothesis must be tested first in empirical reality by collecting data that is relevant to the variables mentioned in the hypothesis. To get a hypothesis that is good or not or also true or not, we must know where the data is obtained and how to get it.

This study takes samples with Saturated Sampling, which is a sampling technique if all populations are used as samples and also known as census terms.

No.	Issuer Code	Company Name
1.	APLN	Agung Podomoro Land Tbk

2.	ASRI	Alam Sutera Realty Tbk
3.	BAPA	Bekasi Asri Pemula Tbk
4.	BCIP	Bumi Citra Permai Tbk
5.	BEST	Bekasi Fajar Industrial Estate Tbk
6.	BIPP	Bhuwanatala Indah Permai Tbk
7.	BKDP	Bukit Darmo Property Tbk
8.	BKSL	Sentul City Tbk
9.	BSDE	Bumi Serpong Damai Tbk
10.	CTRA	Ciputra Development Tbk
11.	CTRP	Ciputra Property Tbk
12.	CTRS	Ciputra Surya Tbk
13.	DART	Duta Anggada Realty Tbk
14.	DLD	Intiland Development Tbk
15.	DUTI	Duta Pertiwi Tbk
16.	ELTY	Bakrieland Development Tbk
17.	EMDE	Megapolitan Developments Tbk
18.	FMII	Fortune Mate Indonesia Tbk
19.	GAMA	Gading Development Tbk
20.	GPRA	Perdana Gapura Prima Tbk
21.	GWSA	Greenwood Sejahtera Tbk
22.	JRPT	Jaya Real Property Tbk
23.	KIJA	Kawasan Industri Jababeka Tbk
24.	KPIG	MNC Land Tbk
25.	LPCK	Lippo Cikarang Tbk
26.	LPKR	Lippo Karawaci Tbk
27.	MDLN	Modernland Realty Ltd Tbk
28.	MKPI	Metropolitan Kentjana Tbk

29.	MTLA	Metropolitan Land Tbk
30.	MTSM	Metro Realty Tbk
31.	NIRO	Nirvana Development Tbk
32.	OMRE	Indonesia Prima Property Tbk
33.	PLIN	Plaza Indonesia Realty Tbk
34.	PWON	Pakuwon Jati Tbk
35.	RBMS	Ristia Bintang Mahkotasejati Tbk
36.	SCBD	Danayasa Arthatama Tbk
37.	SMBR	PT Semen Baturaja (Persero) Tbk
38.	SMDM	Suryamas Dutamakmur Tbk

Source: Data <http://www.idx.co.id/id-id> (Accessed September 9, 2014).

In this study the data collection method used is by conducting documentation studies to collect secondary data in the form of financial statements of real estate and property companies listed on the Indonesia Stock Exchange in 2011-2013. Sources of data obtained by researchers are not directly and have been published. Secondary data is obtained through the Indonesia Stock Exchange website, [www.idx.co.id](http://www.idx.co.id). The results of data processing above are to answer the hypotheses in this study which consist of:

1. The growth of assets and capital structure simultaneously and partially affects the profitability of real estate and property companies listed on the Indonesia Stock Exchange.
2. Management ownership is able to moderate the relationship between the growth of assets and capital structure with the profitability of real estate and property companies listed on the Indonesia Stock Exchange.

### Operational Definition and Variable Measurement

This study uses an independent variable, namely asset growth. An asset is an asset used for a company's operational activities. Asset growth is the percentage increase or decrease in assets from one period to the next. The assessment of asset growth variables is done by formula:

$$\frac{\text{Total Aset } t - \text{Total Aset } t-1}{\text{Total Aset } t-1}$$

Furthermore, the Operational Definition and Variable Measurement can be seen in Table 3.1.

**Table 3.1. Operational Definition and Variable Measurement**

Variable Type	Variable Name	Operational Definition	Scale Measure
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ment			
<b>Independent</b>	<b>Asset Growth</b> <b>(X<sub>1</sub>)</b>	Percentage of increase or decrease in assets from one period to the next	Ratio
	<b>Capital Structure</b> <b>(X<sub>2</sub>)</b>	<b>Debt Ratio/ (DER)</b>  <i>Debt to Equity Ratio is the ratio used to assess debt with equity.</i>	
<b>Dependent</b>	<b>Profitability</b> <b>(Y)</b>	<b>Return on assets (ROA)</b> is a profitability ratio that shows the comparison between earnings (after tax) and total assets	Ratio
<b>Moderating</b>	<b>Managerial Ownership</b> <b>(Z)</b>	Management Ownership (MO) is measured by using a ratio between the number of shares held by managers or directors and the board of commissioners to the total outstanding shares	Ratio

## 4. RESULT

### 4.1. Normality Test

The normality test is used to determine whether the population of the data is normally distributed or not. This test is usually used to measure ordinal, interval, or ratio data. If the analysis uses parametric methods, then the requirements for normality must be fulfilled, ie data comes from a normal distribution. The normality test aims to test whether in the regression model, the interrupting or residual variables have a normal distribution. If this assumption is violated, the statistical test becomes invalid or biased especially for small samples. The normality test can be done through two approaches,

namely through the graphical approach (histogram and P-P plot) or the kolmogorov-smirnov, chi-square, Liliefors and Shapiro-Wilk tests. In this case the normality test is carried out through two approaches, namely through a graphical approach (histogram and P-P plot).

#### 4.2. Multicollinearity Test

Multicollinearity test is used to determine whether or not there is a classic deviation of multicollinearity assumption that is the existence of a linear relationship between independent variables in the regression model.

#### 4.3. Heteroscedasticity Test

Heteroscedasticity test is used to determine the presence or absence of classical assumptions heteroscedasticity, namely the existence of variance inequalities from residuals for all observations in the regression model.

In this study this method is by looking at the scatterplot graph between standardized predicted value (ZPRED) and studentized residual (SRESID). There is a certain pattern on the scatterplot chart between SRESID and ZPRED where the Y axis is Y predicted and the X axis is residual (Y predictions - Y actually).

Basic decision making, namely:

1. If there is a certain pattern, such as the existing points form a certain pattern that is regular (wavy, widened and then narrowed), then heteroscedasticity occurs.
2. If there is no clear pattern, such as points spread above and below the number 0 on the Y axis, there is no heteroscedasticity.

#### 4.4. Autocorrelation Test

Autocorrelation test is used to determine whether or not there is a classic deviation of autocorrelation ie correlation that occurs between residuals in one observation with other observations in the regression model.

**Autocorrelation Test Table  
Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.391 <sup>a</sup>	.153	.078	6.081	2.045

a. Predictors: (Constant), Managerial Ownership (Z), Asset Growth (X1), Capital Structure (X2)

b. Dependent Variable: Profitability (Y)

From the results of the above output, the DW value generated from the regression model is 2.045. Whereas from the DW table with a significance of 0.05 and the amount of data (n) = 114, and k = 2 (k is the number of independent variables), the value of dL is 1.3730 and dU is 1.5937 (see attachment). Because the value of  $du \leq DW \leq (4 - dU)$ , or  $1.5937 \leq 2,045 \leq (2.4063)$ , means that it is free from Autocorrelation..

## **5. DISCUSSION**

### **5.1. Effect of Asset Growth and Capital Structure on the Profitability of Real Estate and Property Companies Listed on the Indonesia Stock Exchange**

Based on the results of the analysis obtained a significant value of 0.025 smaller than 0.05 so that it can be said that simultaneously the asset growth variable and capital structure influence profitability. The results of the above research are in line with the results of research conducted by Tjikouwa (2012) where both of these studies use the same variables, namely the assets growth and capital structure as independent variables and which affect the dependent variable, namely the profitability.

### **5.2. Management Ownership Able to Moderate the Relationship Between Asset Growth (X1) and Capital Structure (X2) with Profitability**

Management ownership variables are significant and able to moderate (strengthen) the relationship between asset growth variables and capital structure with profitability variables. The results of this study are related to previous research by Andriawan (2012) where both researchers used management ownership as a moderating variable and the dependent variable was profitability. The results of this study were not in line where the results showed that the ROE variable and management ownership variables did not strengthen or weaken the relationship between corporate social responsibility and company value Management ownership is able to moderate the relationship between asset growth (X1) and capital structure (X2) with profitability.

### **5.3. Management Ownership as a Moderating Variable**

Based on the residual test results it is known that the profitability variable has a significant value of 0.009 smaller than 0.05 and has a positive parameter coefficient value of 0.002. So it can be concluded that management ownership variables are able to moderate the relationship between asset growth and capital structure to profitability.

## **6. CONCLUSION**

According to the results of the data analysis carried out, some conclusions can be obtained, including:

1. Simultaneously and partially the asset growth variable has a significant effect on profitability, the results of this study are consistent with the results of Tjikouwa's research (2012) but are not consistent with the results of Mohammadzadeh, et.al (2013), Chisti, et.all (2013), Shubita ( 2012), and Chisti, et.all (2013).
2. Management ownership is able to moderate (strengthen) the relationship between asset growth and capital structure with profitability, the results of this study are consistent with the results of Ramana's research. Et.all; (2013), but it is not consistent with the results of Samisi's research (2013), and Andriawan (2012).

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